



Integrated Device Technology, Inc.
6024 Silver Creek Valley Road, San Jose, CA 95138

PRODUCT/PROCESS CHANGE NOTICE (PCN)

PCN #: **W1909-01** DATE: September 20, 2019

Product Affected: P9221-19AHGI (8)
 P9221-23AHGI (8)

Date Effective: October 20, 2019

MEANS OF DISTINGUISHING CHANGED DEVICES:

- Product Mark
- Back Mark
- Date Code
- Other

Traceability to the Fab location is provided through the 2 digit sequential lot code on the date code line of the top mark

Contact: IDT PCN Desk

Attachment: Yes No

E-mail: idt-pcn@lm.renesas.com

Samples: Please contact your local sales representative for sample request.

DESCRIPTION AND PURPOSE OF CHANGE:

- Die Technology
 - Wafer Fabrication Process
 - Assembly Process
 - Equipment
 - Material
 - Testing
 - Manufacturing Site
 - Data Sheet
 - Other - Die revision change
- This notification is to advise our customers that IDT has qualified TSMC Fab 6 as an alternate Foundry for the products listed on this notice.
- This is to provide additional manufacturing capacity for these products.
- There is no change to the product design or process technology as the existing qualified Foundry, TSMC Fab 8.
- There is also no change to the package, backend manufacturing process or the data sheet.
- Refer to page 2 for the qualification report.

RELIABILITY/QUALIFICATION SUMMARY:

Based on wafer and component level qualification to date and characterization tests, there is no change to the performance or reliability of the product.

CUSTOMER ACKNOWLEDGMENT OF RECEIPT:

IDT records indicate that you require written notification of this change. Please use the acknowledgement below or E-Mail to grant approval or request additional information. If IDT does not receive acknowledgement within 30 days of this notice it will be assumed that this change is acceptable.

IDT reserves the right to ship either version manufactured after the process change effective date until the inventory on the earlier version has been depleted.

Customer: _____

Approval for shipments prior to effective date.

Name/Date: _____

E-Mail Address: _____

Title: _____

Phone # /Fax #: _____

CUSTOMER COMMENTS:

IDT ACKNOWLEDGMENT OF RECEIPT:

RECD. BY: _____

DATE: _____

Qualification Report

Product Type: IDTP9221-15 (Wireless Power Receiver/Transmitter) – Fab 6			
Device Family:	AW694T	Process Technology:	CV018G BCD gen2, 1P4M
Package Type:	AHG52 (WLCSP52)	Fab Location:	TSMC Fab 6

Test Description	Standard	Test Conditions	Sample Size	Reject	Comments
Device Characterization	IDT's datasheet condition		80	0	Pass
ESD: Human Body Model	JESD22-A114 (JS-001) Classification – 1B	1 KV	3	0	Pass 1KV
ESD: Charged Device Model	JESD22-C101 Classification – C1	500 V	3	0	Pass 500V
Latch-Up	JESD78	+/-100mA I/O and 1.5x Vcc OV stress, Class II (85°C)	3	0	Pass
Early Life Failure Rate (ELFR)	JESD22-A108, JESD74	48 hrs. @ 125 °C, Vcc = 11V	3 x 834	0	Pass
High Temperature Operating Life (HTOL)	JESD22-A108, +125°C, Vcc-max	1,000 hrs. @ 125 °C, Vcc =11V	3 x 77	0	Pass
High Temperature Storage (HTS)	JESD22-A103	150°C, 1000 hrs	3 x 77	0	Pass
Temperature Cycling (TC)	JESD22-A113, JESD22-A104	Cond. B. -55°C to 125°C, 700 cyc	3 x 77	0	Pass
Unbiased Highly Accelerated Stress Test (UHAST)	JESD22-A113, JESD22-A118	Unbiased, 130°C/85%	3 x 77	0	Pass